

In the Claims:

W3

35. (Amended) The method of claim 33, comprising detaching said template from said reading head bracket prior to said attaching said position measuring device to said machine tool.

REMARKS

A. Restriction Requirement

Applicant acknowledges that the inventions of claims 24-47 were elected with traverse on May 14, 2002. Applicant still traverses the restriction requirement since the search of the inventions of claims 1-23 and 24-47 would have significant overlap. Accordingly, a search of both inventions would not be a significant burden on the Examiner. In view of this, Applicant believes that the Restriction Requirement is improper and should be withdrawn.

B. Objections to Drawings

In the Office Action mailed on May 22, 2002, the drawings were objected to for several reasons. First, items 220 and 231 were designated to be missing from FIG. 12. The present Amendment has deleted numeral "231" in the Specification. In addition, Applicant is filing concurrently with the present Amendment a Proposed Amendment to Drawings that adds numeral 220 in FIG. 12 as requested by the Office Action. Accordingly, the objection is overcome and should be withdrawn.

Items 202, 204, 206, 208, 230, 234, 242 and 250 were designated to be missing from FIG. 17. Applicant traverses this objection. FIG. 17 makes reference to what a linear encoder mounted via an x-axis installation using the mounting tool 200 of FIG. 12 would look like. The description that follows regards the use of the mounting tool 200 during the mounting process. Since items 202, 204, 206, 208, 230, 234, 242 and 250 have been previously identified in FIGS. 12-15 and since one of ordinary skill would understand the claimed invention based on a review of FIGS. 12-15 there is no need to add redundant reference numerals on FIG. 17. This is especially true in view of the reduced scale of FIG. 17 which makes it difficult to add all of the numerals requested by the Office Action. Since the numerals used in FIGS. 12-15 are sufficient to describe the embodiment of FIG. 17, the objection is improper and should be withdrawn.

Items 206, 210, 234, 236A-C, 238A-C and 250 were designated to be missing from FIG. 18. Applicant traverses this objection. FIG. 18 makes reference to what a linear encoder mounted via an x-axis installation using the mounting tool 200 of FIG. 12 would look like without using an extension. The description that follows regards the use of the mounting tool 200 during the mounting process. Since items 206, 210, 234, 236A-C, 238A-C and 250 used in the description of the mounting process have been previously identified in FIGS. 12-15 and since one of ordinary skill would understand the embodiment of FIG. 18 based on a review of FIGS. 12-15, there is no need to add

redundant reference numerals on FIG. 18. This is especially true in view of the reduced scale of FIG. 18 which makes it difficult to add all of the numerals requested by the Office Action. Since the numerals used in FIGS. 12-15 are sufficient to describe the embodiment of FIG. 18, the objection is improper and should be withdrawn.

The Office Action requested that the drawing be amended to show the situation where no extension guide is used to reach the embodiment of FIG. 18. Applicant traverses this objection for several reasons. First, FIG. 18 shows the end result of not using an extension guide. Second, how does one show the absence of an element in a drawing? Third, one of ordinary skill would not need to amend FIG. 18 to understand the mounting process used in FIG. 18 since such a person would understand the process based on pages 11-13 of Applicant's Specification. Accordingly, the objection is improper and should be withdrawn.

FIGS. 1-11 were objected to for not being labeled as "Prior Art." Applicant is filing concurrently with the present Amendment a proposed Amendment to Drawings that adds the "Prior Art" labels as requested by the Office Action. Accordingly, the objection is overcome and should be withdrawn.

The drawings and specification were objected to because the relationship between items 236A-C, 236R, L and 238A-C and 238 R, L. Applicant traverses this objection for several reasons. First, there is no item 236C mentioned in the specification or shown in

the drawings. Accordingly, it is impossible to explain the relationship of a nonexistent item. The objection is improper for the additional reason that there is no need to explain the relationship between items 236A-B, 236R, L and 238A-C and 238 R, L in order to understand the present invention. Indeed there does not appear to be any relationship in that items 236A-B, 236R, L have an orientation that corresponds to the orientation and spacing of the mounting holes of the position measuring device (Page 8, lines 9-20) while items 238A-B and 238 R, L have an orientation that corresponds to the orientation and spacing of the mounting holes of the spar (Page 8, lines 22-26). Since one of ordinary skill would understand the invention based on the description of items 236A-B, 236R, L, 238A-C and 238 R, L as described on page 8, the objection is improper and should be withdrawn.

B. Objections to Specification

The specification was objected to because it was unclear whether base 202 is the template claimed. Applicant traverses the objection. Applicant's description at page 8 describes that base 202 is an embodiment of a template. Of course, the claimed template can encompass other structure other than the base 202. Since it is improper as a matter of law to incorporate elements of a disclosed embodiment into the claimed invention, the objection is improper and should be withdrawn.

C. 35 U.S.C. § 112, Second Paragraph

Claim 35 was rejected under 35 U.S.C. § 112, second paragraph, because it was unclear what the “attaching” referred to in the claim. Claim 35 has been amended to clarify that the “attaching” referred to regards the “attaching said position measuring device to said machine tool.” Since the “attaching” referred to is clear in meaning, the rejection has been overcome and should be withdrawn.

D. 35 U.S.C. § 102(b)

1. Claims 24-35

Claims 24-35 were rejected under 35 U.S.C. § 102(b) as being anticipated by the ENC-150 Encoder Mounting Instructions (hereinafter “AcuRite Manual”). Applicant traverses this rejection for several reasons. First, the Office Action has arbitrarily determined that the date of the AcuRite Manual is August 1998. The reasoning behind this determination was that the AcuRite manual must have the same publication date as another AcuRite publication. There is no logical basis for such a determination. Despite the impropriety of the determination, Applicant does state that the AcuRite Manual was publicly available more than one year prior to February 9, 2001 and so qualifies as prior art under 35 U.S.C. § 102(b).

The rejection of independent claim 24 is improper because the AcuRite Manual fails to disclose positioning a template with holes that correspond to mounting holes of a

position measuring device. The AcuRite Manual also fails to disclose forming holes in the machine tool based on positions of the holes of the template. The Office Action has relied on page 2 of the AcuRite Manual as disclosing these two processes. However, the Office Action has failed to identify where on page 2 such processes are disclosed. The reason is that the page does not disclose using a template at all. While the page does disclose marking mounting hole locations it does not disclose using a template with holes to mark such mounting hole locations. Accordingly, the rejection is improper and should be withdrawn.

If the rejection is repeated, Applicant demands that the next Office Action identify what it is relying on as the template. Failing to identify the template is unfair to Applicant since it leaves it to him to guess what is being relied on to reject the claims. Applicant believes that the next Office Action will be unable to identify a plausible template thus revealing the imperpness of the rejection. If the Office Action is relying on the encoder itself of the AcuRite Manual as disclosing the recited template, then the rejection is improper because claim 24 explicitly states that the template is distinct from the position measuring device. Claim 27 also states that the recited template is not a linear encoder.

Besides not being anticipated by the AcuRite Manual, claim 24 and its dependent claims are not rendered obvious by the AcuRite Manual because there is no suggestion to

alter the method of mounting disclosed in the AcuRite Manual by using a template as recited in the claims. Accordingly, claim 24 and its dependent claims are patentable over the AcuRite Manual.

The claims are patentable for the additional reason that the claimed invention responds to a long felt need in the art of mounting of position measuring devices. As described on pages 1-4 of Applicant's Specification, past methods of mounting position measuring devices has required the attachment and removal of the linear encoder and linear encoder components a number of times to mark and form attachment holes. This has led to complicated and lengthy mounting processes in the past. Accordingly, there has been a long felt need in the art to simplify and reduce the time of mounting process for position measuring devices. The invention of claim 24 has met that long felt need.

2. Claims 36-47

Claims 36-47 were rejected under 35 U.S.C. § 102(b) as being anticipated by the AcuRite Manual. Applicant traverses this rejection for reasons similar to those given above. In particular, claim 36 recites positioning a template with holes that correspond to mounting holes of a spar to which a position measuring device is to be attached. The Office Action relies on pages 4-6 as of the AcuRite Manual as disclosing the positioning of such a spar. Besides not disclosing a template with holes that correspond to mounting holes of a position measuring device as shown above in Section D.1, the AcuRite Manual

fails to disclose a template with holes that correspond to mounting holes of a spar.

Accordingly, the rejection is improper and should be withdrawn.

It is noted that the Office Action has not identified what it is relying on in the AcuRite Manual as disclosing the recited template. Again, this is unfair to the Applicant and Applicant demands that the next Office Action specifically identify where the AcuRite Manual discloses a template such as recited in claim 36. If the Office Action is relying on the encoder itself of the AcuRite Manual as disclosing the recited template, then the rejection is improper because claim 36 explicitly states that the template is distinct from the position measuring device. Claim 39 also states that the recited template is not a linear encoder.

The rejection also is improper because the AcuRite Manual fails to disclose forming holes in the machine tool based on positions of the holes of the template. The Office Action has relied on pages 4-6 of the AcuRite Manual as disclosing this process. Again, a review of these pages fails to reveal forming holes from a template such as recited in claim 36. Accordingly, the rejection is improper.

Besides not being anticipated by the AcuRite Manual, claim 36 and its dependent claims are not rendered obvious by the AcuRite Manual because there is no suggestion to alter the method of mounting disclosed in the AcuRite Manual by using a template as recited in the claims. Accordingly, claim 36 and its dependent claims are patentable over

the AcuRite Manual.

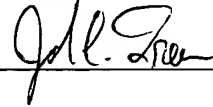
The claims are patentable for the additional reason that the claimed invention responds to a long felt need in the art of mounting of position measuring devices. As described on pages 1-4 of Applicant's Specification, past methods of mounting position measuring devices has required the attachment and removal of the assembly of linear encoder and spar a number of times to mark and form attachment holes. This has led to complicated and lengthy mounting processes in the past. Accordingly, there has been a long felt need in the art to simplify and reduce the time of mounting process for position measuring devices. The invention of claim 36 has met that long felt need.

CONCLUSION

In view of the arguments above, Applicant respectfully submits that all of the pending claims 24-47 are in condition for allowance and seeks an early allowance thereof. If for any reason, the Examiner is unable to allow the application in the next

Office Action and believes that an interview would be helpful to resolve any remaining issues, she is respectfully requested to contact the undersigned attorneys at (312) 321-4200.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "John C. Freeman", is written over a horizontal line.

John C. Freeman
Registration No. 34,483
Attorney for Applicant

BRINKS HOFER
GILSON & LIONE
P.O. Box 10395
Chicago, Illinois 60610
(312) 321-4200

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Marked Up Version of Amended Specification

As shown in FIG. 14, the lower leg 222 has a stem 232 with a threaded opening that lies on top of the base 202. The threaded opening is aligned with a corresponding opening [231] (not shown) formed in the top of the base. A screw is then threaded into the aligned openings resulting in the attachment of the height gage 204 to the base 202. When attached to the base 202, the lower leg 222 extends upward in a vertical direction that is perpendicular to the direction x. Consequently, a portion 232 of the upper leg 220 also extends vertically upward when the lower leg 222 is attached to the base 202.

With the above description of the mounting tool 200 in mind, the processes of mounting a position measuring device, such as a linear encoder, according to the present invention are described hereinafter. In particular, the reading head bracket, like the reading head bracket 116 of FIG. 3, is attached to a position measuring device, such as the linear encoder 102 of FIG. 1, via screws so as to form a [linearencoder] linear encoder assembly. Note that if a spar, like the spar 130 of FIG. 6, is to be used, then it is attached to the linear encoder and, thus, forms part of the linear encoder assembly.

Marked Up Version of Amended Claims

35. (Amended) The method of claim 33, comprising detaching said template from said reading head bracket prior to said attaching said position measuring device to said machine tool.